

Document code: WFEE

United States Patent and Trademark Office  
Sales Receipt for Accounting Date: 07/14/2006

HWIGGINS SALE #00000001      Mailroom Dt: 06/27/2006 061382 10522399  
01 FC:1252                      450.00 DA

Adjustment date: 09/08/2006 ZJUHA1  
07/14/2006 HWIGGINS 00000001 061382 10522399  
01 FC:1252                      450.00 CR

2006 AUG 17 PM 3 35

US PATENT & TRADEMARK PATENT APPLICATION  
IN THE U.S. PATENT AND TRADEMARK OFFICE

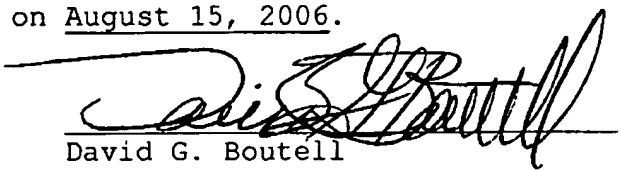
Applicant(s): Michael KOECHER  
Title : MACHINE TOOL WITH A TOOL SHANK AND A CUTTING HEAD  
Serial No. : 10/522 399 Group: 3722  
Confirmation No.: 6316  
Filed : January 21, 2005 Examiner: Talbot  
International Application No.: PCT/EP03/08031  
International Filing Date : July 23, 2003  
Atty. Docket No.: W&L Case 100

Mail Stop 16  
Director of the United States  
Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

FIRST CLASS MAILING CERTIFICATE

Sir:

I hereby certify that this correspondence is being deposited with the United States Postal Service under 37 CFR 1.8 as first class mail in an envelope addressed to: Mail Stop 16, Director of the United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450, on August 15, 2006.

  
David G. Boutell

DGB/kc

FLYNN, THIEL, BOUTELL	Dale H. Thiel	Reg. No. 24 323
& TANIS, P.C.	David G. Boutell	Reg. No. 25 072
2026 Rambling Road	Terryence F. Chapman	Reg. No. 32 549
Kalamazoo, MI 49008-1631	Mark L. Maki	Reg. No. 36 589
Phone: (269) 381-1156	Liane L. Churney	Reg. No. 40 694
Fax: (269) 381-5465	Brian R. Tumm	Reg. No. 36 328
	Steven R. Thiel	Reg. No. 53 685
	Donald J. Wallace	Reg. No. 43 977
	Sidney B. Williams, Jr.	Reg. No. 24 949

Correspondence: REQUEST FOR REFUND  
dated August 15, 2006 (in duplicate),  
including enclosures listed thereon

190.05/05

BEST AVAILABLE COPY

2006 FEB 17 11 4 35

US PATENT AND TRADEMARK  
OFFICE PATENT APPLICATION

IN THE U.S. PATENT AND TRADEMARK OFFICE

August 15, 2006

Applicant(s): Michael KOECHER

For: MACHINE TOOL WITH A TOOL SHANK AND A CUTTING HEAD

Serial No.: 10/522 399 Group: 3722

Confirmation No.: 6316

Filed: January 21, 2005 Examiner: Talbot

International Application No.: PCT/EP03/08031

International Filing Date: July 23, 2003

Atty. Docket No.: W&L Case 100

Mail Stop 16  
Director of the United States  
Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

REQUEST FOR REFUND

Sir:

During a routine review of our Deposit Account No. 06-1382, we noted that an erroneous charge appears on the July 2006 statement for the above-identified patent application.

More specifically, our deposit account has been erroneously charged \$450.00 under Fee Code 1252 (i.e., "extension for response within second month").

Please note that a Response to Office Action (copy enclosed) was timely forwarded to the USPTO on June 22, 2006, and in answer to the Office Action (copy enclosed) mailed April 26, 2006, which Office Action set a three-month time period for the Applicant's reply. A copy of the returned postal card is also enclosed evidencing the USPTO's timely receipt of the Response to Office Action.

BEST AVAILABLE COPY


Serial No. 10/522 399 - Page 2

2006 AUG 17 PM 4:35

Based on the foregoing comments, <sup>US PATENT & TRADEMARK OFFICE</sup> a credit to our Deposit Account (No. 06-1382) in the amount of \$450.00 is in order and such is respectfully requested.

Respectfully submitted,

IN DUPLICATE

  
David G. Boutell

DGB/kc

FLYNN, THIEL, BOUTELL  
& TANIS, P.C.  
2026 Rambling Road  
Kalamazoo, MI 49008-1631  
Phone: (269) 381-1156  
Fax: (269) 381-5465

Dale H. Thiel  
David G. Boutell  
Terryence F. Chapman  
Mark L. Maki  
Liane L. Churney  
Brian R. Tumm  
Steven R. Thiel  
Donald J. Wallace  
Sidney B. Williams, Jr.

Reg. No. 24 323  
Reg. No. 25 072  
Reg. No. 32 549  
Reg. No. 36 589  
Reg. No. 40 694  
Reg. No. 36 328  
Reg. No. 53 685  
Reg. No. 43 977  
Reg. No. 24 949

- Encl: (1) Deposit Account Statement for July 2006, with  
erroneous charge highlighted in yellow (1 page)  
(2) Copy of Office Action mailed April 26, 2006, which  
states that a reply is set to expire 3 months  
from the mailing date of Office Action (5 pages)  
(3) Copy of Response to Office Action  
mailed June 22, 2006 (2 pages)  
(4) Copy of the returned postal card evidencing the  
USPTO's timely receipt of the Response to  
Office Action on June 27, 2006 (1 page)  
(5) POSTAL CARD

110.0703



United States  
Patent and  
Trademark Office

2006 JUL 17 11:43:55

US PATENT & TRADEMARK  
OFFICE

**Deposit Account Statement**

**Requested Statement Month:** July 2006  
**Deposit Account Number:** 061382  
**Name:** FLYNN THIEL BOUTELL & TANIS, P.C.  
**Attention:**  
**Address:** 2026 RAMBLING ROAD  
**City:** KALAMAZOO  
**State:** MI  
**Zip:** 49008-1699  
**Country:** UNITED STATES

DATE	SEQ	POSTING REF TXT	ATTORNEY DOCKET NBR	FEE CODE	AMT	BAL
07/03	385	78539637	4800.T0001US	7004	\$150.00	\$14,70
07/06	384	11455465	3900.P0324US	8021	\$40.00	\$14,66
07/06	395	29258726	3138.P0325US	8021	\$40.00	\$14,62
07/07	96	6503000	6 503 000 (4724.P0003US)	2551	\$450.00	\$14,17
07/07	1786	78924431	3002.T0264US	7001	\$325.00	\$13,84
07/11	16	09423151		9204	-\$457.00	\$14,30
07/11	93	6518535	6 518 535 - 2214.P0004US	1551	\$900.00	\$13,40
07/13	271	6506998	6 506 998 - 5296.P054AUS	1551	\$900.00	\$12,50
07/13	277	6506388	6 506 388 - 3400.P1378US	2551	\$450.00	\$12,05
07/13	284	5861821	5 861 821 - 4600.P0168US	1552	\$2,300.00	\$9,755
07/13	292	78471953	PERMALOC TM 13	7003	\$100.00	\$9,655
07/13	1630	78928588	3008.T0263US	7001	\$325.00	\$9,330
07/14	1	10522399	W&L CASE 100	1252	\$450.00	\$8,880
07/14	5	6793934		9204	-\$2,520.00	\$11,40
07/14	6	90008085	5592.P0029US	1812	\$2,520.00	\$8,880
07/14	78	78928889	5100.T0020US	7001	\$650.00	\$8,230
07/14	1161	78447657	3011.T0220US	7004	\$300.00	\$7,930
07/17	69	E-REPLENISHMENT		9203	-\$20,000.00	\$27,93
07/17	121	78461561	5519.T0015US	8521	\$40.00	\$27,89
07/17	391	29260778	3138.P0324US	8021	\$40.00	\$27,85
07/17	1364	78221965	3900.T0031US	7004	\$300.00	\$27,55
07/18	1675	78461561	5519.T0015US	7003	\$200.00	\$27,35
07/19	162	5329657	5 329 657 - 3006.P0115US	1553	\$3,800.00	\$23,55
07/19	163	5329657	5 329 657 - 3006.P0115US	1556	\$130.00	\$23,42
07/19	179	6507964	6 507 964 - 3006.P0225US	1551	\$900.00	\$22,52
07/19	181	6510852	6 510 852 - 3006.P0249US	1551	\$900.00	\$21,62
07/19	1662	78932636	5200.T0014US	7001	\$325.00	\$21,29

PATENT MAINTENANCE  
FEE

2006/03/17 17:00:05

US PATENT & TRADEMARK  
OFFICE



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,399	01/21/2005	Michael Koecher	W&L Case 100	6316

23474 7590 04/26/2006

FLYNN THIEL BOUTELL & TANIS, P.C.  
2026 RAMBLING ROAD  
KALAMAZOO, MI 49008-1631

DHT \_\_\_\_\_ DGB \_\_\_\_\_ RJT \_\_\_\_\_  
TFC \_\_\_\_\_ MLM \_\_\_\_\_ LLC \_\_\_\_\_  
BRT \_\_\_\_\_ SRT \_\_\_\_\_ SBW \_\_\_\_\_

APR 29 2006

DJW \_\_\_\_\_ KLP \_\_\_\_\_ PMG \_\_\_\_\_  
GMS \_\_\_\_\_ CMC \_\_\_\_\_ TLH \_\_\_\_\_  
FILE \_\_\_\_\_

EXAMINER

TALBOT, MICHAEL

ART UNIT

PAPER NUMBER

3722

DATE MAILED: 04/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

 **COPY**

FILE NO: WOLF 100 ATTY: DGB/DJW  
DUE DATE: 07-26-2006 ( 20060726 )  
5100.P0100US /INIT: ( 20060426 )  
ACTION: 01 RES PER: 3 M DK1

**BEST AVAILABLE COPY**

US PATENT & TRADEMARK

<b>Office Action Summary</b>	Application No. <b>OFFICE</b>	Applicant(s)	
	10/522,399	KOECHER, MICHAEL	
	Examiner Michael W. Talbot	Art Unit 3722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 January 2005.  
 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☒ Claim(s) 1-35 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date   | 6) <input type="checkbox"/> Other   |

**BEST AVAILABLE COPY**

786 125 17 71 4 25

US PATENT & TRADEMARK  
OFFICE

Application/Control Number: 10/522,399

Page 2

Art Unit: 3722

# DETAILED ACTION

## *Election/Restrictions*

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-18, drawn to a cutting tool having a tool shank and a cutting head made of different materials integrally connected to one another via a joining layer made of ductile brazing material. The joining layer having powder particles made of temperature-resistant material having a lower coefficient of thermal expansion than the brazing material and wherein the coefficient of thermal expansion over the joining layer thickness is lower on the cutting head side than on the tool shank side.

Group II, claim(s) 19-23, drawn to a method of producing a cutting tool having a tool shank and cutting head preformed as a blank being integrally connected to one another by fusing and subsequently cooling a brazing filler in a joining gap, thus forming a joining layer. The brazing filler being in the form of at least two brazing disks made of brazing material containing embedded temperature-resistant powder particles and having a different particle density for each brazing disk. The at least two brazing disks being inserted and fused together within the joining gap.

Group III, claim(s) 24-35, drawn to a brazing disk made of ductile brazing material containing embedded temperature-resistant powder particles having a lower coefficient of thermal expansion than the brazing material and wherein the density of the powder particles varies over the disk thickness.

2. The inventions listed as Groups II and III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

3. Group II's technical feature is the specific method of producing a cutting tool starting with a blank tool shank and a blank cutting head, then integrally connecting the two components together by fusing and subsequently cooling a brazing filler consisting of at least two brazing



2003 JUN 17 PM 4:35

US PATENT & TRADE MARK  
OFFICE

Application/Control Number: 10/522,399

Page 3

Art Unit: 3722

disks fused together, having different particle densities, to form the brazing filler. This specific method of producing is lacking from Groups I and III.

4. Group III's technical feature is a singular brazing disk having a varying powder particle density over its thickness. This specific construction is lacking from Groups I and II.

5. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

#### ***Conclusion***

6. Any inquiry concerning the content of this communication from the examiner should be directed to Michael W. Talbot, whose telephone number is 571-272-4481. The examiner's office hours are typically 8:30am until 5:00pm, Monday through Friday. The examiner's supervisor, Ms. Monica S. Carter, may be reached at 571-272-4475.

In order to reduce pendency and avoid potential delays, group 3720 is encouraging FAXing of responses to Office Actions directly into the Group at FAX number 571-273-8300. This practice may be used for filling papers not requiring a fee. It may also be used for filing

PATENT MAINTENANCE  
DIRECT

2006 AUG 17 PM 4:35

US PATENT & TRADEMARK  
OFFICE

Application/Control Number: 10/522,399

Page 4

Art Unit: 3722

papers, which require a fee, by applicants who authorize charges to a USPTO deposit account.

Please identify Examiner Michael W. Talbot of Art Unit 3722 at the top of your cover sheet.



MWT  
Examiner  
19 April 2006

*Monica S. Carter*  
MONICA CARTER  
SUPERVISORY PATENT EXAMINER

BEST AVAILABLE COPY

2016 AUG 17 PM 11:35

US PATENT & TRADEMARK  
OFFICE

PATENT APPLICATION

IN THE U.S. PATENT AND TRADEMARK OFFICE

June 22, 2006

 **COPY**

Applicant(s): Michael KOECHER

For: MACHINE TOOL WITH A TOOL SHANK AND A CUTTING HEAD

Serial No.: 10/522 399

Group: 3722

Confirmation No.: 6316

Filed: January 21, 2005

Examiner: Talbot

International Application No.: PCT/EP03/08031

International Filing Date: July 23, 2003

Atty. Docket No.: W&L Case 100

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**MAILED TO PATENT OFFICE**  
**DATE JUN 22 2006**

RESPONSE TO OFFICE ACTION

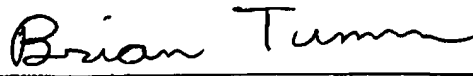
Sir:

In response to the Office Action mailed April 26, 2006,  
Applicant elects as follows:

(Please see following pages.)

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being  
deposited with the United States Postal Service with  
sufficient postage as first class mail in an envelope  
addressed to: Commissioner for Patents, P.O. Box 1450,  
Alexandria, VA 22313-1450, on June 22, 2006.

  
\_\_\_\_\_  
Brian R. Tumm

**BEST AVAILABLE COPY**

Election

Applicant hereby elects without traverse the invention of Group I directed to a cutting tool, corresponding to Claims 1-18. Claims 19-35 are withdrawn as being directed to a non-elected invention.

Further and favorable reconsideration is respectfully solicited.

Respectfully submitted,



Brian R. Tumm

BRT/ad

FLYNN, THIEL, BOUTELL  
& TANIS, P.C.  
2026 Rambling Road  
Kalamazoo, MI 49008-1631  
Phone: (269) 381-1156  
Fax: (269) 381-5465

Dale H. Thiel  
David G. Boutell  
Terryence F. Chapman  
Mark L. Maki  
Liane L. Churney  
Brian R. Tumm  
Steven R. Thiel  
Donald J. Wallace  
Sidney B. Williams, Jr.

Reg. No. 24 323  
Reg. No. 25 072  
Reg. No. 32 549  
Reg. No. 36 589  
Reg. No. 40 694  
Reg. No. 36 328  
Reg. No. 53 685  
Reg. No. 43 977  
Reg. No. 24 949

Encl: Postal Card

136.07/05

706 400 17 17 4 35

US PATENT & TRADEMARK  
OFFICE

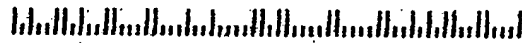
DHT \_\_\_\_\_ DGB \_\_\_\_\_ RJT \_\_\_\_\_  
TFC \_\_\_\_\_ MLM \_\_\_\_\_ LLC \_\_\_\_\_  
BRT \_\_\_\_\_ CBT \_\_\_\_\_ SBW \_\_\_\_\_



JUN 30 2006

DJW \_\_\_\_\_ KLF \_\_\_\_\_ PMG \_\_\_\_\_  
GMS \_\_\_\_\_ CMC \_\_\_\_\_ TLH \_\_\_\_\_

FLYNN, THIE, ROUTELL & TANIS, P.C.  
2026 Rambling Road  
Kalamazoo, Michigan 49008-1631



Received the following: Response to Office Action  
and Mailing Certificate dated June 22, 2006

Applicant(s): Michael KOECHER  
Title: MACHINE TOOL WITH A TOOL SHANK AND A  
CUTTING HEAD  
Serial No.: 10/522 399  
Confirmation No.: 6316  
Filing Date: January 21, 2005  
Examiner: Talbot  
Group: 3722  
Our Ref: W&L Case 100  
Due: July 26, 2006



BEST AVAILABLE COPY